### **PROCEEDINGS**

OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

# TWO NEW LEGUMES FROM MEXICO AND COSTA RICA.

BY C. V. PIPER.

In the course of a critical study of the genus Canavalia it was found necessary to examine also the related genera. The two following plants seem to be undescribed species.

#### Phaseolus chiapasanus, sp. nov.

Herbaceous, climbing, slender-stemmed, the whole plant turning black in drying; stems terete, sparsely pilose with rusty hairs; petioles terete. rusty pilose, longer than the leaflets; stipules oblong-quadrangular, striate. acuminate, glabrous above, pubescent beneath, 1 cm. long; stipels narrowly oblong-lanceolate, striate, curved, pubescent beneath, 3-4 mm. long; petiolules 5-6 mm, long, rusty pubescent; leaflets thin membranaceous, broadly ovate to orbicular, conspicuously acuminate with the tip apiculate, threenerved from the rounded base, sparsely strigillose above, more so beneath especially on the nerves, 7-10 cm. long; flowers in loose slender bracteate racemes; bracts ovate-lanceolate, acuminate, glabrous above, rusty pubescent beneath, 4-5 mm. long, the lower ones entire, the upper divided to the base into 2 or 3 segments; pedicels slender, pubescent, 5-10 mm. long, each bearing a single bracteole at the base of the calyx; gland at base of pedicel expanded, 2-lobed; calyx campanulate, 8-9 mm. long, rusty pubescent with appressed coarse hairs, the lobes much shorter than the tube, the upper lip notched, shorter than the lower, the lobes obtuse, the lower lip 3-lobed, the lateral ones obtuse, the median longer and acute; corolla about 3 cm. long: standard orbicular, emarginate at apex, reniform at base, short-unguiculate, 2.5 cm. long, 2 cm. broad, rather firm in texture, a linear gland in the middle toward the base; wings as long as the body of the keel, unguiculate, the stalk and middle portion thickish, the terminal third thin and expanded. a short lobe near the middle; keel thickish, semicircularly curved, the narnow beak in two complete coils about 5 mm. broad; stamens diadelphous; ovary linear, rusty pubescent; style bearded on the under side toward the tin: stigma scarcely enlarged, lateral, covered with retrorse papillae.

Finca Mexiquito, Chiapas, Mexico, C. A. Purpus 6881, Sept., 1913 (type in the U. S. National Herbarium, sheet No. 567,182).

### Calopogonium ferrugineum, n. sp.

Herbaceous?; whole plant more or less densely covered with short appressed ferruginous hairs; stems terete, densely hairy; petioles channelled above, shorter than the leaflets; stipules oblong, acutish and somewhat lacerate, pubescent on both sides, 3 mm. long; stipels narrowly lanceolate; petiolules densely pubescent, 3-4 mm. long; leaflets broadly ovate, the median as broad as long, entire or obscurely 2- or 3-lobed, 3-nerved from the rounded base, acuminate and apiculate, sparsely strigillose above more so on the nerves, densely appressed pubescent beneath, 7-8 cm. long; inflorescence a narrow erect panicle 20-30 cm. long on a stout peduncle nearly as long; branches of the panicle very short, thickened, each bearing 3-5 flowers; flowers deflexed, on slender pedicels about 5 mm. long; calyx campanulate, densely ferruginous, 6 mm. long, the upper lip shorter than the lower and with 2 short acutish teeth, the lower lip with 3 acute teeth, the median longest and nearly as long as the calvx tube; bracteole at base of calvx minute, oblong-lanceolate; corolla purple, 7-8 mm. long; standard orbicular, obliquely nerved, not notched at apex, auricle at base, the auricles inflexed, unguiculate, the claw one-fourth as long as the blade, a linear thickening on each side of a median depression at the base of the blade; wings as long as the keel, spatulate, obtuse, unguiculate, each with a hornlike reflexed auricle at base; keel curved, blunt, the petals slightly united, somewhat gibbous, unguiculate, each blade with a hood-shaped or rarely horn shaped sac at base; ovary linear, densely hairy; style sparsely hairy beneath, coiled once at tip; pods (immature) linear, compressed, recurved at tip, densely ferruginous, not constricted between the seeds, 9 cm. long, 1.5 cm, wide, the stout pedicel 1 cm, long.

Buissons a Las Vueltas, Tucurrique, Costa Rica, A. Tonduz 12889, Dec., 1898, sheet 577,657 in U. S. National Herbarium. Allied to C. coeruleum (Benth.) Desv. but readily distinguished by the form of the leaflets, the ferruginous appressed pubescence, the orbicular entire standard, and the much larger not constricted pods. The style in C. coeruleum is less hairy and straight.